

Case 3058

Arctocephalus F. Cuvier, 1826 and *Callorhinus* Gray, 1859 (Mammalia, Pinnipedia): proposed conservation by the designation of *Phoca pusilla* Schreber, [1775] as the type species of *Arctocephalus*; and *Otaria* Péron, 1816 and *Eumetopias* Gill, 1866: proposed conservation by the designation of *Phoca leonina* Molina, 1782 as the type species of *Otaria*

Alfred L. Gardner

U.S. Geological Survey, Patuxent Wildlife Research Center, National Museum of Natural History, Washington, D.C. 20560-0111, U.S.A. (e-mail: gardner.alfred@nrmnh.si.edu)

C. Brian Robbins

Division of Mammals, National Museum of Natural History, Washington, D.C. 20560-0108, U.S.A. (e-mail: robbins.brian@nrmnh.si.edu)

Abstract. The purpose of this application is to conserve the accustomed understanding and usage of the fur seal name *Arctocephalus* F. Cuvier, 1826 by the designation of *Phoca pusilla* Schreber, [1775] as the type species, thus conserving also the name *Callorhinus* Gray, 1859. At present *Phoca ursina* Linnaeus, 1758 is the valid type species of both *Arctocephalus* and *Callorhinus*. The name *Arctocephalus* relates to a genus of some seven fur seals from the southern hemisphere, while *Callorhinus* is used for the single species *C. ursinus* (Linnaeus) from the northern hemisphere. It is also proposed that the universal understanding of the names *Otaria* Péron, 1816 and *Eumetopias* Gill, 1866 should be conserved for the southern and northern sea lions respectively by designating *Phoca leonina* Molina, 1782 (for which the valid specific name is *P. byronia* de Blainville, 1820) as the type species of *Otaria*. At present *Phoca jubata* Schreber, [1776] is the type species of *Otaria* and the name *Otaria* is a senior subjective synonym of *Eumetopias*. The four genera *Arctocephalus*, *Callorhinus*, *Otaria* and *Eumetopias* are all placed in the family OTARIIDAE Gray, 1825.

Keywords. Nomenclature; taxonomy; Mammalia; Pinnipedia; OTARIIDAE; eared seals; fur seals; sea lions; *Arctocephalus*; *Callorhinus*; *Otaria*; *Eumetopias*; *Arctocephalus pusillus*; *Callorhinus ursinus*; *Otaria leonina*; *Otaria byronia*; *Eumetopias jubata*.

1. Péron (1816, p. 37, footnote) proposed the name *Otaria* for the eared fur seals and sea lions and was the first to separate these from the earless seals (*Phoca* Linnaeus, 1758). He included five species in *Otaria*, among them *Phoca ursina* Linnaeus, 1758, *P. leonina* Molina, 1782 (nec *P. leonina* Linnaeus, 1758, the elephant seal) and *P. jubata* Schreber, [1776], but he did not designate a type species.

2. G. Cuvier (1817, pp. 166–167) referred to Péron's name for eared seals as 'Les Phoques à oreilles extérieures (Otaries. Péron)' and recognized only two species of eared seals, *Phoca jubata* 'Gmelin, 1788' (sea lions) and *P. ursina* 'Gmelin, 1788' (fur seals).

3. Fischer (1817, p. 445), citing 'Otaries Péron. Les phoques à oreilles. Cuv. Regne An. 1., p. 166,' proposed the name *Otaes* for the eared seals that G. Cuvier had identified as *Phoca jubata* and *P. ursina*; he did not designate a type species.

4. F. Cuvier (1824) divided the seals into seven generic groups and gave a description, illustration and type species for each. However, for each generic group he used only a French vernacular, including 'Arctocéphale'. The type species of this genus was given (p. 208) as *Phoca ursina* Linnaeus, 1758 (p. 37), which was based on Steller's (1751, p. 331, pl. 15) '*Ursus marinus*' from the Bering Sea. In 1826 F. Cuvier referred (p. 541) to his previous (1824) publication, summarised the characteristics of each generic group, and adopted Latinized names, including (p. 554) that of *Arctocephalus*, which is available from this authorship and date. F. Cuvier wrote (p. 553): 'Le type de ce genre nous est offert par l'ours marin, *Phoca ursina*, Linn. ...'. He listed only one species (p. 554): 'L'Arctocéphale oursin: *Arctocephalus ursinus*; *Ursus marinus* Steller, *Novi comment. petrop.*, II, p. 331; Buff., Suppl. 6, pl. 47', and noted that 'Steller a trouvé cette espèce dans les îles Aleutiennes, et on pourrait croire qu'elle a été retrouvée par Permetti aux îles Malouines [Malvinas or Falklands], et par Forster au Cap'. Clearly he believed there was only one species of *Arctocephalus* with a distribution in both hemispheres.

5. Allen (1870, 1880, 1902, 1905), Gill (1866), Gray (1866a, 1866b, 1869), Peters (1866) and Trouessart (1897, 1904) dated *Arctocephalus* from F. Cuvier's (1824) use of the name 'Arctocéphale', following a common practice of the day to use names in their Latinized form but to date them from their first appearance as vernaculars.

6. Gray (1859c, p. 359) proposed the name *Callorhinus* for the species of fur seal which he had earlier (1859a, p. 103, pl. 68; 1859b, p. 108) identified and described as *Arctocephalus ursinus* (= *Phoca ursina* Linnaeus, 1758). He separated *ursinus* from other *Arctocephalus* species on the basis of its distinctive skull features and, contrary to Cuvier's type species designation (see para. 4 above), retained the name *Arctocephalus* for species of fur seals from the southern hemisphere.

7. The usage of the names *Arctocephalus* F. Cuvier, 1826 and *Callorhinus* Gray, 1859 has been retained since Gray (1859); see, for example, the following well-known checklists of Simpson (1945, p. 121), Ellerman & Morrison-Scott (1951, p. 322), Ellerman, Morrison-Scott & Hayman (1953, pp. 152–153), Nel in Meester & Setzer (1971), Corbet (1978, p. 186), Corbet & Hill (1986, p. 120) and Wozencraft in Wilson & Reeder (1993). The name *Arctocephalus* currently relates to some seven species of fur seals from the southern hemisphere, and *Callorhinus* is used for the single species *C. ursinus* (Linnaeus, 1758) from the northern hemisphere. However, both genera were based on *Phoca ursina* Linnaeus and the name *Callorhinus* is thus formally a junior objective synonym of *Arctocephalus*. We propose that *Phoca pusilla* Schreber, [1775] (p. 314 [1776], pl. 85 [1775]), the South African fur seal, be designated the type species of *Arctocephalus* in accord with usage (see, for example, Ellerman, Morrison-Scott & Hayman, 1953; Wozencraft in Wilson & Reeder, 1993). This designation will remove the synonymy and allow the long usage of both generic names to be maintained.

8. Four genus-group names were proposed in 1866 for southern fur seals:

(1) *Halarctus* Gill, 1866 (p. 7), type species *Arctocephalus delalandii* Gray, 1859b (an unnecessary replacement name for *Otaria pusilla* Schreber, [1775]) by monotypy and original designation. Published April 1866.

(2) *Arctophoca* Peters, 1866 (p. 276), type species *Otaria philippii* Peters, 1866 by monotypy (described as a subgenus of *Otaria* Péron, 1816). This description appeared in the May issue of the *Monatsberichte der Königlich Akademie der Wissenschaften zu Berlin*; it probably appeared at the end of May or shortly thereafter, but before September when cited by Gray (1866c, p. 228).

(3) *Euotaria* Gray, 1866c (p. 236), type species *Arctocephalus nigrescens* Gray, 1859b (a junior synonym of *Phoca australis* Zimmermann, 1783) by monotypy (described as a subgenus of *Arctocephalus* F. Cuvier, 1826). Published September 1866.

(4) *Gypsophoca* Gray, 1866c (p. 236), type species *Arctocephalus cinereus* Gray, 1866a (a junior synonym of *Otaria forsteri* Lesson, 1828) by monotypy (described as a subgenus of *Arctocephalus* F. Cuvier, 1826). Published September 1866.

Thus, four generic names subsequent to *Arctocephalus* F. Cuvier, 1826 are available for the fur seals of the southern hemisphere. However, *Arctocephalus* has been nearly universally applied to these fur seals for at least 150 years (see para. 7 above) and to substitute *Halarctus* Gill, 1866 or any other of the junior synonyms for this well-known name would be certain to create confusion.

9. Palmer (1892, p. 156) proposed the name *Callotaria* as a replacement name for *Callorhinus* Gray, 1859 on the assumption that *Callorhinus* was preoccupied by *Callirhinus* Blanchard, 1850 (a beetle genus) and *Callirhinus* Girard, 1857 (a snake). He (Palmer, 1901) subsequently pointed out that his replacement name was unnecessary because *Otoes* Fischer, 1817 was available and antedated *Callorhinus* Gray, 1859 (see para. 3 above). Palmer (1901, p. 134) adopted the name *Otoes* for the northern fur seal and designated '*Phoca ursina* Gmelin (= *Phoca ursina* Linn.)' as the type species. Allen (1902, p. 116; see also 1905) disagreed with Palmer's designation, claiming that *Phoca jubata* and *Phoca ursina* as used by Fischer (1817) were composite and that '*Otoes* is unavailable for the *Callotaria* group, since if one name can ever be considered as a synonym of another, it is evident that *Otoes* and *Otaria* holds such a relation'. Subsequent authors (including Palmer, 1904, p. 488) acquiesced in Allen's argument and listed *Otoes* Fischer as a synonym of *Otaria* Péron (see, for example, Cabrera, 1958, p. 301). Nevertheless, Palmer's (1901) type species designation is valid and *Otoes* Fischer, 1817 is the oldest available generic name for the northern fur seal. However, this seal has been almost universally known by the name *Callorhinus* Gray, 1859 and, considering the voluminous literature on it, adoption of the generic name *Otoes* would certainly create confusion. We propose that the name *Otoes* Fischer, 1817 be suppressed.

10. The name *Otaria* Péron, 1816 relates to sea lions, not fur seals. It is the basis of the family OTARIIDAE Gray, 1825, which includes *Arctocephalus* F. Cuvier, 1826 and *Callorhinus* Gray, 1859, as well as *Otaria*. Palmer (1904, p. 486) designated *Otaria leonina* 'Péron' (i.e. *Phoca leonina* Molina, 1782, p. 282, a junior primary homonym of *P. leonina* Linnaeus, 1758, the elephant seal) as the type species of *Otaria*, in which sense the name is consistently used (the valid specific name for this

species is that of *Phoca byronia* de Blainville, 1820a, pp. 287, 300; 1820b, p. 419, fig. 3). However, recognition of an earlier type species designation for *Otaria* by Gill (1866, p. 7) of *Phoca jubata* Schreber, [1776] would render the name *Otaria* a senior subjective synonym of *Eumetopias* Gill, 1866 (p. 7), which is in use for the monospecific northern sea lion genus. The genus *Eumetopias* was based on *Arctocephalus monteriensis* Gray, 1859c (p. 358, pl. 72), a junior synonym of *Phoca jubata* Schreber, [1776] (p. 300, pl. 83B). The latter is the first available name for Steller's (1751, p. 360) sea lion 'Leo marinus' from Kamchatka and the Bering Strait area. We propose that *Phoca leonina* Molina, 1782 be designated the type species of *Otaria* in accord with universal usage.

11. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

- (a) to suppress the name *Otoes* Fischer, 1817 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (b) to set aside all previous type species fixations for the nominal genus *Arctocephalus* F. Cuvier, 1826 and to designate *Phoca pusilla* Schreber, [1775] as the type species;
- (c) to set aside all previous type species fixations for the nominal genus *Otaria* Péron, 1816 and to designate *Phoca leonina* Molina, 1782 as the type species;

(2) to place on the Official List of Generic Names in Zoology the following names:

- (a) *Arctocephalus* F. Cuvier, 1826 (gender: masculine), type species by designation under the plenary powers in (1)(b) above *Phoca pusilla* Schreber, [1775];
- (b) *Callorhinus* Gray, 1859 (gender: masculine), type species by monotypy *Phoca ursina* Linnaeus, 1758;
- (c) *Otaria* Péron, 1816 (gender: feminine), type species by designation under the plenary powers in (1)(c) above *Phoca leonina* Molina, 1782 (invalid senior subjective synonym of *Phoca byronia* de Blainville, 1820);
- (d) *Eumetopias* Gill, 1866 (gender: masculine), type species by monotypy *Arctocephalus monteriensis* Gray, 1859 (a junior subjective synonym of *Phoca jubata* Schreber, [1776]);

(3) to place on the Official List of Specific Names in Zoology the following names:

- (a) *pusilla* Schreber, [1775], as published in the binomen *Phoca pusilla* (specific name of the type species of *Arctocephalus* F. Cuvier, 1826);
- (b) *ursina* Linnaeus, 1758, as published in the binomen *Phoca ursina* (specific name of the type species of *Callorhinus* Gray, 1859);
- (c) *byronia* de Blainville, 1820, as published in the binomen *Phoca byronia* (first available subjective synonym of *Phoca leonina* Molina, 1782, the type species of *Otaria* Péron, 1816);
- (d) *jubata* Schreber, [1776], as published in the binomen *Phoca jubata* (senior subjective synonym of *Arctocephalus monteriensis* Gray, 1859, the type species of *Eumetopias* Gill, 1866);

(4) to place on the Official List of Rejected and Invalid Generic Names in Zoology the following names:

- (a) *Otoes* Fischer, 1817, as suppressed in (1)(a) above;

- (b) *Halarctus* Gill, 1866 (a junior objective synonym of *Arctocephalus* F. Cuvier, 1826);
- (c) *Callotaria* Palmer, 1892 (a junior objective synonym of *Callorhinus* Gray, 1859).

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